



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,178	12/23/2003	Li-Ming Cheng	21406-001	7280
60951 7590 02/03/2009				
WPAT, PC INTELLECTUAL PROPERTY ATTORNEYS 2030 MAIN STREET, SUITE 1300 IRVINE, CA 92614			EXAMINER JOHNSON, BLAIR M	
			ART UNIT 3634	PAPER NUMBER
			MAIL DATE 02/03/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/743,178  
Filing Date: December 23, 2003  
Appellant(s): CHENG ET AL.

---

Anthony S. King  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/9/08 appealing from the Office action mailed 6/13/08.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2,594,637	Gertzson	4-1952
5,482,100	Kuhar	1-1996

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 50-55,58-65 and 67-73 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gertzson in view of Kuhar '100.

Gertzson discloses an upper longitudinally extending, straight channel 10 and a lower member, either the lowest slat or a well known bottom rail, suspended by primary lines 33 and secondary line 17, and four pulleys 34,35, over which the cords traverse. While the location of the connection between lines 33 and line 17, as well as the movement of the connection over pulleys, is clearly an obvious design modification based on headrail size, blind length, number of pulleys, etc., Gertzson specifically states that the entire system of rollers receive both cords 33. Consequently, both cords 33 are entrained around both pulleys 35 and these cords change direction numerous times. What is not shown is the dual rotors and spring retraction system in a housing in the channel. However, such is well known in the art, as illustrated by Kuhar. It would have been obvious to modify Gertzson by replacing the hanging portion of the manual, exposed, pull cord end 17 with the retraction means taught by Kuhar so as to create a balanced system as well as to remove the safety hazard inherent in the hanging cord 17. The location of the dual rotor member would be at the cord lock 13,14,16, etc. Regarding claim 65, the "secondary rotor member" reads on one of the pulleys in the headrail. Regarding claims 70-73, to entrain the cords around the rotors numerous times merely duplicates the arrangement in Gertzson and would have been obvious so as to permit

more cord to be wrapped on the spring motor (or go through the cord lock of Gertzson) without the coupling encountering the spring motor (or cord lock).

Claims 70-73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 70, the recitation of "the first pulley rotors" is ambiguous since only one first rotor has been recited. The same is true for "the second pulley rotors" in claim 71. In claim 72, there is no antecedent basis for "the consecutive alignment".

#### **(10) Response to Argument**

Appellant's arguments begin on page 8. On that page groups of the claims are identified and numbered 1-11. However, based on the substantive arguments below, there are only three groups: Claims 50,51, and 62-69; claims 52-61; and claims 70-73.

#### **Claim 50 (claims 51 and 62-69 standing or falling therewith).**

Appellant has submitted 4 declarations, listed in the evidence appendix. While the brief is long, almost all of the content is repeated under each argument heading. Reference will be made below of such duplication as it arises.

Appellant makes numerous references to the declarations. The declarations were addressed by the Examiner in the final rejection and such comments are repeated:

"The affidavit of Mr. Zerg has been considered and appreciated, but it is not persuasive. Low costs, lighter weight, and fewer components are indicated as desirable characteristics achieved by Applicant and not present in the prior art. However, such features are not claimed and would be difficult to claim. Recited are lines, rotors and a spring motor. These things are present in the prior art as applied. Nothing in the recitation of these elements limits them regarding the low costs, etc. Mr. Zerg asserts that one would not provide Gertzson with a spring motor cord storage system of Kuhar. Quite to the contrary, the desire to alleviate the dangling pull cord of Gertzson is exactly what led to the now widespread use of spring motors and storage spools for the lift cords. Not only is such a combination obvious without a specific teaching to combine, but Kuhar provides a specific teaching to combine, which is to replace the hanging pull cord of a blind. This is a well motivated combination of teachings.

Applicant's remarks are similar to that of Mr. Zerg's. In addition, Applicant states that replacing the cord lock of Gertzson with a spring motor would destroy Gertzson. If this is true, any combination of teachings proposed 103 rejections would "destroy" the primary reference. Obviously, this is not the case.

The declaration by Mr. Swart is not persuasive. It appears that the success is a result of switching the main product from vinyl roller shades to pleated shades. This is a reflection of the entire market, which made a similar shift, and not in the currently claimed details of the blind.

The declaration by Applicant, as well as by Mr. Chao, is not persuasive. By stating that he would not have made such a combination of references as proposed had he been aware of the references constitutes a form of "hindsight". Also, Applicant's motivation to combine does not have to be the same as proposed by the Examiner, which is to alleviate the need for a hanging pull cord."

Within these declarations, certain arguments are presented, contained in the brief, regarding the prior art rejection. One such arguments appears on page 11, where the Zerg declaration alleges that the teachings of Kuhar teach away from it's combination with Gertzson since Kuhar teaches the use of friction while Gertzson avoids friction by using pulleys. Kuhar provides slots 56 for adjustably providing friction as needed to balance the shade. The same concept would be useful in Gertzson since the weight of the shade and the resulting force on the cords 33,17, changes as the shade is raised and lowered. Furthermore, Kuhar states that such friction is used "if necessary", column 2, lines 65-66, thereby clearly stating that friction is not necessary. It is further noted that the only teaching of Kuhar that is applied to Gertzson is the spring motor system 40 to replace the lifting cord 17 of Gertzson, which is specifically suggested by Kuhar in column 1, lines 7-11, which states: "The present invention relates generally to the art of Venetian blinds and window shades, and more specifically to a system in which lifting cords and cord locking mechanisms are eliminated." This is a clear suggestion to modify Gertzson.

An argument presented by Appellant appears at the top of page 12 which challenges the Examiner's assertion that the desire to alleviate the dangling pull cord of Gertzson has led to the use of spring motors. In this regard, reference is made to the excerpt above from Kuhar specifically stating such to be the case. Kuhar is only one of dozens, if not hundreds, of patents that have incorporated such spring motors to establish what are commonly call "cordless" shades since hanging pull/lift cords have been omitted in the name of safety. Clearly, replacing the hanging cord of Gertzson with a spring driven spool is explicitly suggested by the Kuhar prior art.

On page 13 begins another argument derived from the Zerg declaration. It maintains that to combine Gertzson and Kuhar, the entire operating system of Gertzson would be replaced by Kuhar since Kuhar is concerned with replacing cumbersome parts, such as the pulleys of Gertzson. However, the scope of the features provided by a secondary reference to be applied to a primary reference are many and varied. There are numerous features that could be supplied to Gertzson from Kuhar. The Examiner has proposed only using the retraction spool/spring motor of Kuhar in Gertzson and since such a combination does not destroy Gertzson, as discussed above. Applying more teachings from Kuhar to Gertzson is clearly not required.

On page 17, Appellant argues that physical incorporation of the components of Kuhar into Gertzson is not possible. However, physical corporation is not proposed, just a combination of teachings, of which physical incorporation would have been well within the purview of one of ordinary skill in the art.



Also on page 17 begins an argument against "obvious to try". However, no such rationale has been proposed by the Examiner.

Regarding the commercial success argument beginning on page 18, such has been addressed in depth in the final rejection, from which the following is taken:

"The declaration by Mr. Swart is not persuasive. It appears that the success is a result of switching the main product from vinyl roller shades to pleated shades. This is a reflection of the entire market, which made a similar shift, and not in the currently claimed details of the blind." Regarding the argument of "unexpected results" beginning on page 20. Appellant argues that Kuhar requires heavy springs. However, this is determined by the size of the blind. Furthermore, as pointed out above, the pulleys of Gertzson will provide friction to offset the spring force and blind weight, exactly as in the appealed invention.

Claim 52 (claims 53-61 standing or falling therewith).

Arguments regarding claim 52 begin on page 21. Appellant argues that the pulley system of the present invention entrains cords so that they "wind on top of themselves". However, such a limitation has not been claimed. For example, claim 52 merely states that cords change direction, which is clearly met by Gertzson. Furthermore, if claimed, merely reusing pulleys for multiple windings would have been obvious so as store more cord in a smaller headrail and with fewer pulleys. All other arguments in this section (pages 21-36) are repeated from those in the section regarding claim 50.

Arguments regarding claim 53 begin on page 36. Since these arguments are repeated from those of claim 52 (and 50), claim 53 stands or falls with claim 52.

Arguments regarding claim 54 begin on page 50. Since these arguments are repeated from those of claim 52 and 53 (and 50), claim 54 stands or falls with claim 52.

Arguments regarding claims 62,63 and 65 begin on page 64. All arguments in this section (pages 64-77) are repeated from those in the section regarding claim 50. Since these arguments are repeated from those of claim 50, these claims stand or fall with claim 50.

Arguments regarding claim 64 begin on page 77. All arguments in this section (pages 77-92) are repeated from those in the section regarding claim 50 and claim 64 stands or falls with claim 50.

Arguments regarding claims 67-69 begin on page 92. All arguments in this section (pages 92-105) are repeated from those in the section regarding claim 50 and these claims stand or fall with claim 50.

Claim 70 (claims 71-73 standing or falling therewith).

Arguments regarding claim 70 begin on page 105. As stated in the final rejection: "Regarding claims 70-73, to entrain the cords around the rotors numerous times merely duplicates the arrangement in Gertzson and would have been obvious so as to permit more cord to be wrapped on the spring motor (or go through the cord lock of Gertzson) without the coupling encountering the spring motor (or cord lock)." The Examiner believes that the Gertzson cords 33, by changing direction, complete a "lap" by going

from one end of the support channel to the other, with multiple laps being contemplated as being obvious as pointed out in the final rejection. If "laps" are considered to be that the cords actually go around the same pulleys multiple times, such is also considered obvious since merely reusing pulleys for multiple windings would have been obvious so as store more cord in a smaller headrail and with fewer pulleys. All other arguments in this section (pages 105-119) are repeated from those in the section regarding claim 50.

Arguments regarding claims 71-73 (pages 119-171), each individually, are repeated from those in the section regarding claim 50. Consequently, they are interpreted as standing or falling with claim 70, from which they depend.

112 (2) rejection.

Regarding the 112 second paragraph rejection, Appellant's arguments are not understood. Claim 70 recites "a first pulley rotor" in lines 12-13 and recites "the first pulley rotors" in line 17. It is unclear if there are one or a plurality of first pulley rotors. The same is true for the second rotor pulleys. For examining purposes, it is assumed that only one first and one second rotor pulleys are claimed. The rejection concerning "consecutive alignment" is rescinded.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Blair M. Johnson/

Primary Examiner, Art Unit 3634

Conferees:

/KATHERINE W MITCHELL/

Supervisory Patent Examiner, Art Unit 3634

/Marc Jimenez/

TQAS TC 3600